

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the applications:

**Listing of Claims:**

Claims 1-12. (Canceled).

Claim 13. (Currently Amended) A vascular graft comprising:

a core zone comprising a PET fabric, said core zone having a first surface and a second surface opposing said first surface, wherein the first surface is a blood interface surface; and  
a first non-porous coating disposed on said first surface and permeating into at least a portion of said core zone, such that said at least one portion of said core zone is impermeable, wherein said first coating comprises at least one polyurethane; wherein the coating comprises a polyurethane urea, wherein said first coating has a thickness of about 12 $\mu$ m.

Claim 14. (Currently Amended) A vascular graft comprising:

a core zone comprising a PET fabric, said core zone having a first surface and a second surface opposing said first surface, wherein the first surface is a blood interface surface; and  
a first non-porous coating disposed on said first surface and permeating into at least a portion of said core zone, such that said at least one portion of said core zone is impermeable, wherein said first coating comprises at least one polyurethane; wherein the coating comprises a polyetherurethane urea blended with a siloxane containing a surface modifying additive, wherein said first coating has a thickness of about 12 $\mu$ m.

Claim 15. (Canceled).

Claim 16. (Currently Amended) A vascular graft comprising:

a core zone comprising a PET fabric, said core zone having a first surface and a second surface opposing said first surface, wherein the first surface is a blood interface surface; and  
a first non-porous coating disposed on said first surface and permeating into at least a portion of said core zone, such that said at least one portion of said core zone is impermeable, wherein said first coating comprises at least one polyurethane; wherein said at least one polyurethane comprises a soft segment and a hard segment, wherein said first coating has a thickness of about 12 $\mu$ m.

Claim 17. (Original) The graft of claim 16 wherein the soft segment has a molecular weight of about 2,000 g/mole.

Claim 18. (Original) The graft of claim 16 wherein the soft segment comprises one or more compounds selected from the group consisting of polyethylene oxide, polypropylene oxide, polytetramethylene oxide, polycarbonate, polyolefin, polysiloxane, polyether soft segments made from higher homologous series of diols, and mixtures and combinations thereof.

Claim 19. (Original) The graft of claim 16 wherein the hard segment comprises one or more compounds selected from the group consisting of 4,4'-diphenylmethane diisocyanate, tetramethylene diisocyanate, hexamethylene diisocyanate, trimethyhexamethylene diisocyanate, tetramethylxylylene diisocyanate, 4,4'-decyclohexylmethane diisocyanate, dimer acid diisocyanate, isophorone diisocyanate, metaxylene diisocyanate, diethylbenzene diisocyanate, decamethylene 1,10 diisocyanate, cyclohexylene 1,2-diisocyanate, 2,4-toluene diisocyanate, 2,6-toluene diisocyanate, xylene diisocyanate, m-phenylene diisocyanate, hexahydrotolylene diisocyanate (and isomers), naphthylene-1,5-diisocyanate, 1-methoxyphenyl 2,4-diisocyanate, 4,4'-biphenylene diisocyanate, 3,3-dimethoxy-4,4'-biphenyl diisocyanate, ethylene diamine, propane diamines, butanediamines, hexanediamines, pentane diamines, heptane diamines, octane diamines, m-xylylene diamine, 1,4-cyclohexane diamine, 2-methypentamethylene diamine, 4,4'-methylene dianiline, alkanol amines and diamines, ethylene glycol, diethylene glycol, triethylene glycol, 1,4-butanediol, neopentyl alcohol, 1,6-hexanediol, 1,8-octanediol, propylene glycols, 2,3-butylene glycol, dipropylene glycol, dibutylene glycol, glycerol, and mixtures and combinations thereof.

Claim 20. (Original) The graft of claim 16 wherein said coating comprises a polyether urethane urea, and wherein said soft segment comprises polytetramethylene oxide (PTMO) and said hard segment comprises 4,4'-diphenylmethane diisocyanate (MDI) and ethylene diamine.

Claims 21-50. (Canceled).

Claim 51. (Currently Amended) A vascular graft comprising:

a core zone comprising a PET fabric, said core zone having a first surface and a second surface opposing said first surface, wherein the first surface is a blood interface surface; and

a first non-porous coating disposed on said first surface and permeating into at least a portion of said core zone, such that said at least one portion of said core zone is impermeable, wherein said first coating comprises at least one polyurethane; wherein the coating comprises a polyurethane urea ~~The graft of claim 13~~, wherein said first coating has a thickness in a range of about 4 $\mu$ m to about 5 $\mu$ m.

Claim 52. (Canceled).

Claim 53. (Currently Amended) A vascular graft comprising:

a core zone comprising a PET fabric, said core zone having a first surface and a second surface opposing said first surface, wherein the first surface is a blood interface surface; and

a first non-porous coating disposed on said first surface and permeating into at least a portion of said core zone, such that said at least one portion of said core zone is impermeable, wherein said first coating comprises at least one polyurethane; wherein the coating comprises a polyetherurethane urea blended with a siloxane containing a surface modifying additive ~~The graft of claim 14~~, wherein said first coating has a thickness in a range of about 4 $\mu$ m to about 5 $\mu$ m.

Claim 54. (Canceled).

Claim 55. (Currently Amended) A vascular graft comprising:

a core zone comprising a PET fabric, said core zone having a first surface and a second surface opposing said first surface, wherein the first surface is a blood interface surface; and

a first non-porous coating disposed on said first surface and permeating into at least a portion of said core zone, such that said at least one portion of said core zone is impermeable, wherein said first coating comprises at least one polyurethane; wherein said at least one polyurethane comprises a soft segment and a hard segment ~~The graft of claim 16~~, wherein said first coating has a thickness in a range of about 4 $\mu$ m to about 5 $\mu$ m.

Claim 56. (New) The graft of claim 55 wherein the soft segment has a molecular weight of about 2,000 g/mole.

Claim 57. (New) The graft of claim 55 wherein the soft segment comprises one or more compounds selected from the group consisting of polyethylene oxide, polypropylene oxide, polytetramethylene oxide, polycarbonate, polyolefin, polysiloxane, polyether soft segments made from higher homologous series of diols, and mixtures and combinations thereof.

Claim 58. (New) The graft of claim 55 wherein the hard segment comprises one or more compounds selected from the group consisting of 4,4'-diphenylmethane diisocyanate, tetramethylene diisocyanate, hexamethylene diisocyanate, trimethyhexamethylene diisocyanate, tetramethylxylylene diisocyanate, 4,4'-decyclohexylmethane diisocyanate, dimer acid diisocyanate, isophorone diisocyanate, metaxylene diisocyanate, diethylbenzene diisocyanate, decamethylene 1,10 diisocyanate, cyclohexylene 1,2-diisocyanate, 2,4-toluene diisocyanate, 2,6-

toluene diisocyanate, xylene diisocyanate, m-phenylene diisocyanate, hexahydrotolylene diisocyanate (and isomers), naphthylene-1,5-diisocyanate, 1-methoxyphenyl 2,4-diisocyanate, 4,4'-biphenylene diisocyanate, 3,3-dimethoxy-4,4'-biphenyl diisocyanate, ethylene diamine, propane diamines, butanediamines, hexanediamines, pentane diamines, heptane diamines, octane diamines, m-xylylene diamine, 1,4-cyclohexane diamine, 2-methypentamethylene diamine, 4,4'-methylene dianiline, alkanol amines and diamines, ethylene glycol, diethylene glycol, triethylene glycol, 1,4-butanediol, neopentyl alcohol, 1,6-hexanediol, 1,8-octanediol, propylene glycols, 2,3-butylene glycol, dipropylene glycol, dibutylene glycol, glycerol, and mixtures and combinations thereof.

**Request for Reconsideration:**

In the Responsive Amendment filed February 28, 2005, Applicants added new claims, but failed to cancel a corresponding number of finally rejected claims. Applicants now are submitting a substitute Responsive Amendment which provides for equal additions and cancelations of claims and clarifies that claims 17-20 remain in this application.

By this substitute Responsive Amendment, Applicants are amending claims 13, 14, and 16, to include the limitations of claims 50, 52, and 54, respectively. Further, Applicants are rewriting claims 51, 53, and 55 in independent form to include the limitations of their base claims. Applicants also are cancelling claims 50, 52, and 54, without prejudice. In addition, Applicants are adding new claims 56-58, which depend from amended claim 55 and correspond to claims 17-19. **Thus, Applicants are canceling three claims (claims 50, 52, and 54) and are adding an exactly equal number of claims (claims 56-58).** Moreover, Applicants are not now attempting to add new claim 59, so that the number of claims canceled and the number of claims added are exactly equal. No new matter is added by these amendments, and the amendments are fully supported by the specification. As a result of these amendments claims 13, 14, 16-20, 51, 53, and 55-58 are pending in this application.

Applicants previously submitted a check in the amount of \$400 for fee (Fee Code 1201) for filing two, additional independent claims. Nevertheless, in the event of any variance between the fees previously determined and paid by Applicants and those determined by the U.S. Patent and Trademark Office (PTO), please charge any such variance to the undersigned's Deposit Account No. 02-0375. Applicants respectfully request that the Examiner enter these amendments and reconsider the above-captioned patent application in view of the foregoing amendments and the following remarks.